Old fort Heber Built 1859 See Dick Nicol Chart 80 Kods square -Later one more belock north was added Tabernacle built from 18\_ to 18
Architect! Alex Fortie Stone cutters Stone Masons Surveyors Old Social Hall (main st) ginished-Started\_\_\_18 who built it Made of lumber (ship lap)
Location \_\_\_\_\_\_\_ immediately No. of mednick Buel Store Amuse ment Hall (Sv Lilizen Center)
Started - Fine \_\_\_\_ Started\_\_\_\_ Who built -

1.	Report No.	2. Government Accession No.	3. Recipient's Catalog No.		
	FAA-AM-72-4				
4.	Title and Subtitle		5. Report Date		
	THE EFFECTS OF ALCOHOL OF	January 1972			
	DURING INSTRUMENT FLIGHT		6. Performing Organization Code		
<u> </u>					
7.	Author(s)		8. Performing Organization Report No.		
ł	Charles E. Billings, M.D.				
	Ralph J. Gerke, M.S., Robert C. Chase, M.S.				
9.	Performing Organization Name and Addres	8	10. Work Unit No.		
	Aviation Medicine Research				
	Departments of Preventive Medicine, Aviation		11. Contract or Grant No.		
	and the Computer Center		on compet of ordin its.		
	The Ohio State University		10		
10	Columbus, Ohio 43212		13. Type of Report and Period Covered		
12.	Sponsoring Agency Name and Address		OAN Desemb		
	Office of Aviation Medica		OAM Report		
	Federal Aviation Administ	tration			
	800 Independence Avenue,	S.W.	14. Sponsoring Agency Code		
	Washington, D. C. 20590				
15.	Supplementary Notes				

This research was conducted under Contract No. FA68AC-6089-2, Project No. RF-2626.

## 16. Abstract

Sixteen instrument-rated pilots, eight of whom were very experienced professional aviators, flew Instrument Landing System approaches in a Cessna 172 under simulated instrument flight conditions while sober and while under the influence of 40, 80, and 120 mg% of blood ethyl alcohol. Each pilot flew four approaches to minimums on each of two occasions at each alcohol level.

The data collected during these approaches included continuous measurement of aircraft position with respect to localizer and glide path centerlines and airspeed. Note was made of procedural errors committed during the flights.

The subjects showed significant and progressive decremental effects of alcohol at all of the levels studied. The more experienced pilots maintained their ability to guide the aircraft better than did the less experienced subjects, particularly at high levels of blood alcohol. Both groups, however, demonstrated progressive increases in the number and seriousness of procedural errors with increasing levels of alcohol.

It is concluded that even 40 mg% of blood alcohol exerts decremental effects on performance which are incompatible with flight safety.

Alcohol Pilot Performance Instrument Flight	be released to the Information Service	Availability is unlimited. Document may be released to the National Technical Information Service, Springfield, Virginia 22151, for sale to the public.		
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages 74	22. Price \$3.00	
Unclassified	Unclassified	74	\$3.00	